



Division of
**Health Care
Finance & Administration**

Health Care
Innovation Initiative

EPIISODE DESIGN FEEDBACK SESSION

MAY 16, 2017



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RESPIRATORY AND PRIMARY CARE EPISODES

Episodes Included in the Respiratory & Primary Care Session

Acute Asthma
Exacerbation

COPD

Pneumonia

Respiratory
Infection

Inpatient
UTI

Outpatient
UTI

Perinatal

Approach to the feedback session and objectives for today's discussion

Approach & Process

1. **May 2017:** Gather feedback from Stakeholders across the state on the first 20 episodes implemented
2. **May-June 2017:** Conduct analysis to inform decision of how to incorporate feedback
3. **Fall 2017:** Release memo to public with all episode changes
4. **January 2018:** Incorporate selected changes into program for calendar year 2018

Objectives & Scope for Today

1. Briefly review the background and objectives of the Tennessee Health Care Innovation Initiative & Episodes of care
2. Review feedback received prior to the meeting regarding the respiratory and primary care episodes
3. Listen to and capture feedback *specific* to the respiratory and primary care episodes
4. Capture feedback on the program overall

The primary purpose of today's session is listening; the state will respond to and incorporate feedback as appropriate over the coming months

Tennessee Health Care Innovation Initiative



We are **deeply committed** to reforming the way that we pay for healthcare in Tennessee

Our goal is to **pay for outcomes and for quality care**, and to reward strongly performing providers

We plan to have value-based payment account for the **majority of healthcare spend** within the next three to five years

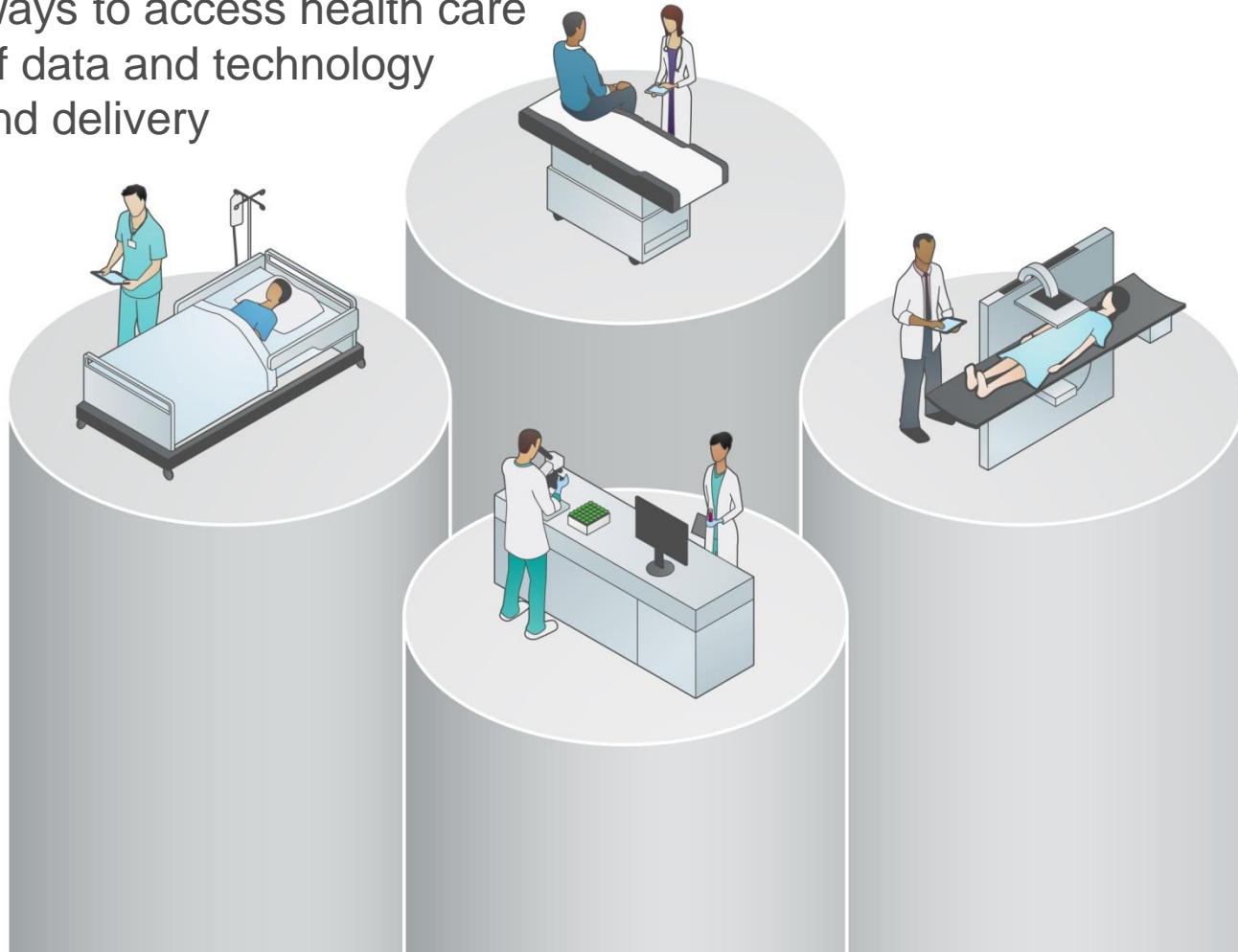
By **aligning on common approaches** we will see greater impact and ease the transition for providers

We appreciate that hospitals, medical providers, and payers have all demonstrated a **sincere willingness** to move toward payment reform

By working together, we can make significant progress toward **sustainable medical costs and improving care**

What changes do we see for the health care system?

- Silos are starting to come down
- Growth in new ways to access health care
- Increased use of data and technology
- New payment and delivery models



Over 40 episodes of care have been designed over the last 4 years

Design year & waveEpisode			Design year & waveEpisode			Design year & waveEpisode		
2013	1	Perinatal	2016	5	Breast biopsy	2017	7	Spinal fusion
		Asthma acute exacerbation			Breast cancer, medical oncology			Spinal decompression (without spinal fusion)
		Total joint replacement			Breast cancer, Mastectomy			Femur/pelvis fracture
2014	2	COPD acute exacerbation			Otitis media			Knee arthroscopy
		Colonoscopy			Tonsillectomy			Ankle sprains, strains, and fractures
		Cholecystectomy			Anxiety			Wrist sprains, strains, and fractures
		PCI - acute			Non-emergent depression			Shoulder sprains, strains, and fractures
		PCI - non acute						Knee sprains, strains, and fractures
2015	3	GI hemorrhage	2016	6	Skin and soft tissue infections			Back/neck pain
		EGD			Neonatal (Age 31 weeks or less)			
		Respiratory Infection			Neonatal (Age 32 to 36 weeks)			
		Pneumonia			Neonatal (Age 37 weeks or greater)			
		UTI - outpatient			HIV			
		UTI - inpatient			Pancreatitis			
	4	ADHD			Diabetes acute exacerbation			
		CHF acute exacerbation						
		ODD						
		CABG						
		Valve repair and replacement						
		Bariatric surgery						

Results for First Three Episodes

- ❖ Perinatal, total joint replacement and acute asthma exacerbation episodes showed total costs were reduced while quality was maintained in CY 2015.

**Perinatal: 3.4%
decrease in cost**

**Acute asthma
exacerbation: 8.8%
decrease in cost**

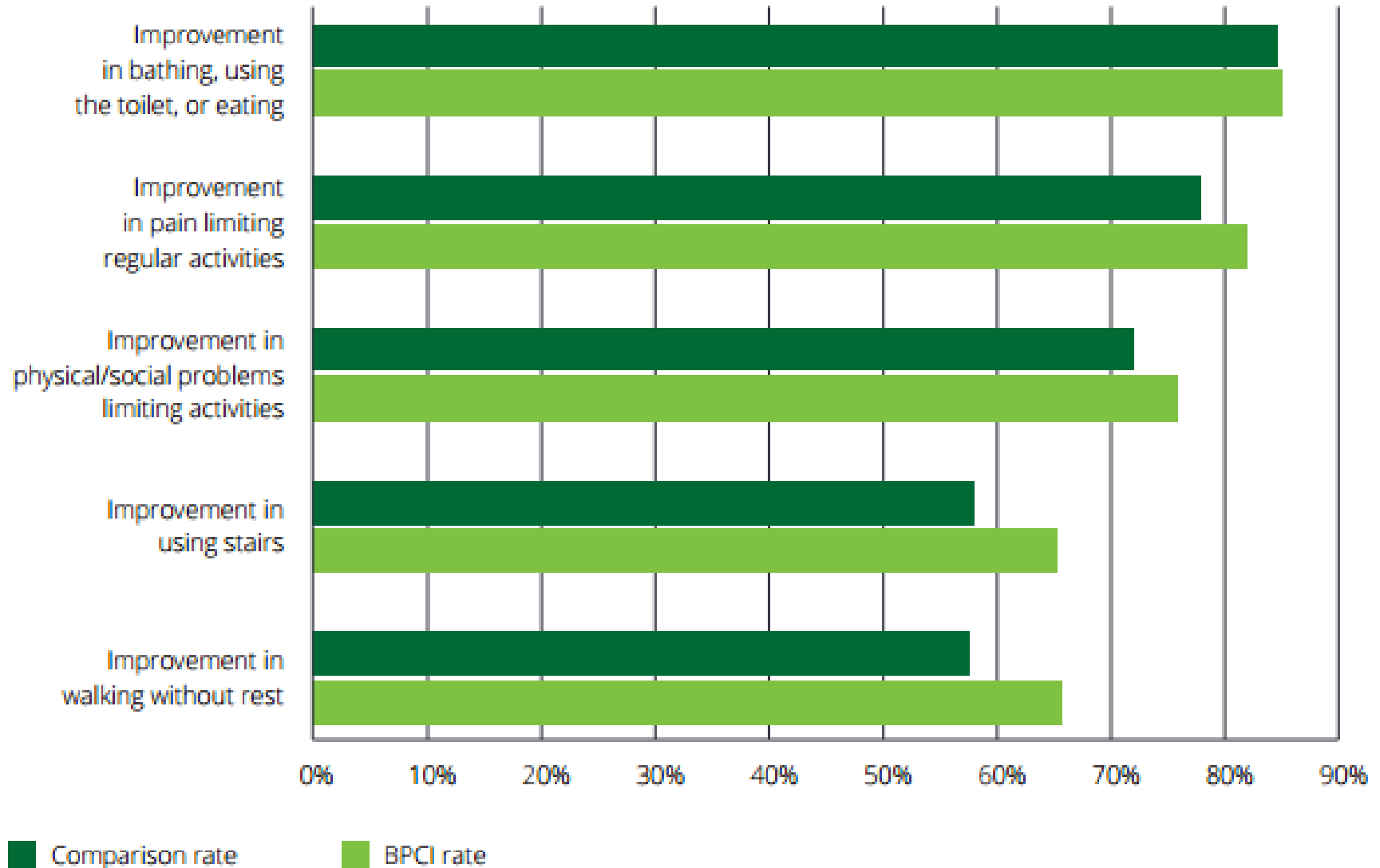
**Total joint
replacement: 6.7%
decrease in cost**

**Doctors and hospitals
reduced costs while
maintaining quality of
care**

**Wave 1 episodes
reduced costs by \$11.1
million**

**(assuming a 3 percent increase
would have taken place in the
absence of this initiative)**

Bundled services for major joint replacement of the lower extremity showed improvement in mobility measures for patients



Source: CMS Bundled Payments for Care Improvement Initiative Models 2-4: Year 2 Evaluation & Monitoring Annual Report, 2016.

Status of the launched Respiratory and Primary Care Episodes

RES/PRIM

	First Preview Report Sent	Performance Period
Acute Asthma Exacerbation, Perinatal (Wave I)	2014	1 st : CY 2015 2 nd : CY 2016 3 rd : CY 2017
COPD (Wave II)	2015	1 st : CY 2016 2 nd : CY 2017
Pneumonia, Respiratory Infection, Outpatient UTI, Inpatient UTI (Wave III)	Spring 2016	1 st : CY 2017

Perinatal episode definition

Area	Episode definition
1 Identifying episode triggers	<ul style="list-style-type: none"> A professional claim with delivery procedure code, along with an associated facility claim with a diagnosis code for a live birth in an inpatient or outpatient setting.
2 Attributing episodes to quarterbacks	<ul style="list-style-type: none"> The quarterback is the provider or provider group (by Tax ID) that performs the delivery
3 Identifying services to include in episode spend	<ul style="list-style-type: none"> Episode begins 40 weeks prior to day of admission for delivery and ends 60 days after discharge Prior to admission for delivery: All care associated with a pregnancy-related ICD-9 diagnosis code is included (unless explicitly excluded), including all ED claims. All medications claims for mother are included (unless explicitly excluded e.g., biologics) During delivery admission: All claims included After discharge: <ul style="list-style-type: none"> Readmissions: Related care from 0-30 days after discharge and relevant claims 31-60 days after discharge. All ED claims during 0-30 days after discharge and relevant ED claims 31-60 days after discharge not previously excluded based on readmission exclusions outlined above. All other care associated with a pregnancy-related ICD-9 diagnosis code is included (unless explicitly excluded). Medications: All claims for mother are included (unless explicitly excluded e.g., biologics) All care related to neonatal care is not included
4 Risk-adjusting and excluding episodes	<ul style="list-style-type: none"> Episodes affected by factors that make them inherently more costly than others are risk adjusted. Episodes which are not comparable or affected by factors that make them inherently more costly but that cannot be risk-adjusted for are excluded. There are three types of exclusions: <ul style="list-style-type: none"> Business exclusions: Available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice, age 65 or older) Clinical exclusions: Cancer under active management, HIV, multiple sclerosis, bleeding clotting disorders such as hemophilia, three or more gestations High cost outlier exclusions: Episode's risk adjusted spend is three standard deviations above the mean
5 Determining quality metrics performance	<p>Tied to gain sharing:</p> <ul style="list-style-type: none"> Percent of valid episodes where the patient is screened for HIV within the episode window Percent of valid episodes where the patient is screened for Group B streptococcus within the episode window Percent of valid episodes where the patient undergoes a C-Section within the trigger window <p>Not tied to gain sharing</p> <ul style="list-style-type: none"> Percent of valid episodes where the patient is screened for gestational diabetes within the episode window Percent of valid episodes where the patient is screened for asymptomatic bacteriuria during the episode window Percent of valid episodes where the patient is screened for Hepatitis B specific antigens within the episode window Percent of valid episodes where the patient is given a Tdap vaccination within the episode window

Asthma episode definition

Area	Episode definition
1 Identifying episode triggers	<ul style="list-style-type: none"> An emergency department, observation room, or inpatient visit for an acute exacerbation of asthma, bronchospasm, or wheezing¹
2 Attributing episodes to quarterbacks	<ul style="list-style-type: none"> The quarterback is the facility of the trigger claim
3 Identifying services to include in episode spend	<ul style="list-style-type: none"> Episode begins with the acute exacerbation and ends 30 days after discharge During the trigger event: All medical and prescription drug claims included After discharge: Claims for related services only (with a Primary Dx code related to asthma) <ul style="list-style-type: none"> Readmissions: Related care 0-30 days after discharge including possible related complications Medications: Relevant medications
4 Risk-adjusting and excluding episodes	<ul style="list-style-type: none"> Episodes affected by factors that make them inherently more costly than others are risk adjusted. Episodes which are not comparable or affected by factors that make them inherently more costly but that cannot be risk-adjusted for are excluded. There are three types of exclusions: <ul style="list-style-type: none"> Business exclusions: Available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice, age 65 or older) Clinical exclusions: Intubation during the episode, tracheostomy during the episode or in prior year, cystic fibrosis during the episode or in prior year, pulmonary hypertension during the episode or in prior year, supplemental oxygen during the post-trigger window, chronic airway obstruction during the episode or in prior year, active cancer management, HIV/AIDS, multiple sclerosis, blood clotting disorders such as hemophilia High cost outlier exclusions: Episode's risk adjusted spend is three standard deviations above the mean
5 Determining quality metrics performance	<p>Tied to gain sharing:</p> <ul style="list-style-type: none"> Percent of valid episodes where the patient receives relevant follow-up care within the post-trigger window, Percent of patients on appropriate medications determined by an administration of or filled prescription for oral corticosteroids and/or injectable corticosteroids within the trigger and post-trigger window. Patients < 5 years old are excluded from this quality metric. <p>Not tied to gain sharing:</p> <ul style="list-style-type: none"> Percent of valid episodes where the patient has a repeat asthma acute exacerbation within the post-trigger window Percent of valid episodes where the acute exacerbation during the trigger window is treated in an inpatient setting Percent of valid episodes where smoking cessation counseling for the patient and/or family was offered Percent of valid episodes where education on proper use of medication, trigger avoidance, or asthma action plan was discussed Percent of valid episodes where the patient receives a chest x-ray

¹ The ICD-9 code 786.07 (wheezing) is a potential trigger if the code is present in the primary diagnosis field of an emergency department, observation room, or inpatient facility and if at least one asthma or bronchospasm code is present in any diagnostic field of an inpatient, emergency department, outpatient, or professional claim within 365 days prior to the potential trigger event

COPD Acute Exacerbation episode definition

Area	Episode definition
1 Identifying episode triggers	<ul style="list-style-type: none"> An inpatient admission or observation or emergency department visit where the primary diagnosis is a COPD acute exacerbation diagnosis code.
2 Attributing episodes to quarterbacks	<ul style="list-style-type: none"> The Quarterback is the facility of the trigger claim.
3 Identifying services to include in episode spend	<ul style="list-style-type: none"> The episode does not have a pre-trigger window. The trigger window begins on the first day of the final facility during the first COPD acute exacerbation encounter of an episode and ends day of discharge from that admission. The post-trigger window begins on discharge from the final hospital in the initial trigger window and continues to the later of the 30 days or the last day of discharge from any readmission that starts within that 30 day post-trigger period Trigger window: All claims included (starting from the final transfer facility during the trigger window). <ul style="list-style-type: none"> Trigger must be preceded by 30-day period clean of any claim or combination thereof that would trigger an COPD acute exacerbation episode All medications included Post-trigger window: Claims for related services only (with a Primary Dx code related to COPD) <ul style="list-style-type: none"> Readmissions: All costs relating to related readmissions Relevant medications included
4 Risk-adjusting and excluding episodes	<ul style="list-style-type: none"> Episodes affected by factors that make them inherently more costly than others are risk adjusted. Episodes which are not comparable or affected by factors that make them inherently more costly but that cannot be risk-adjusted for are excluded. There are three types of exclusions: <ul style="list-style-type: none"> Business exclusions: Available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice, age 65 or older) Clinical exclusions: Intubation, cystic fibrosis, bronchiectasis, lung cancer, end stage renal disease, active cancer management, HIV/AIDS, blood clotting disorders such as hemophilia High cost outlier exclusions: Episode's risk adjusted spend is three standard deviations above the mean
5 Determining quality metrics performance	<p>Tied to gain sharing:</p> <ul style="list-style-type: none"> Percent of valid episodes where the patient receives relevant follow-up care within the post-trigger window <p>Not tied to gain sharing:</p> <ul style="list-style-type: none"> Percent of valid episodes where the patient has a repeat COPD acute exacerbation within the post-trigger window Percent of valid episodes where the acute exacerbation during the trigger window is treated in an inpatient setting Percent of valid episodes where smoking cessation counseling for the patient and/or family was offered

Respiratory infection episode definition

Area	Episode definition
1 Identifying episode triggers	<ul style="list-style-type: none"> A respiratory infection episode is triggered by a professional claim where either <ul style="list-style-type: none"> The primary diagnosis is one of the defined RI trigger codes, along with an E&M code for an office, outpatient, or ED setting, or The primary diagnosis is unspecified viral infection, with a secondary diagnosis code from the respiratory infection trigger codes
2 Attributing episodes to Quarterbacks	<ul style="list-style-type: none"> The quarterback is the clinician or clinician group that diagnosed the respiratory infection
3 Identifying services to include in episode spend	<ul style="list-style-type: none"> All related care – such as imaging and testing, follow-up visits, and medications – is included in the episode spend Facility fees associated to the E&M visit on the day the RI was diagnosed, are not included in spend The episode starts with the triggering event and ends 14 days after the diagnosis
4 Risk adjusting and excluding episodes	<ul style="list-style-type: none"> Episodes affected by factors that make them inherently more costly than others are risk adjusted. Episodes which are not comparable or affected by factors that make them inherently more costly but that cannot be risk-adjusted for are excluded. There are three types of exclusions: <ul style="list-style-type: none"> Business exclusions: Available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice, Age younger than 90 days of age or >64) Clinical exclusions: Acute epiglottitis, admission during the trigger window or one day after, cancer under active management, coma, cystic fibrosis, end stage renal disease, multiple sclerosis, organ transplant, Parkinson's, supraglottitis High cost outlier exclusions: Episode's risk adjusted spend is three standard deviations above the mean
5 Determining quality metrics performance	<p>Tied to gain sharing:</p> <ul style="list-style-type: none"> None <p>Not tied to gain sharing:</p> <ul style="list-style-type: none"> Emergency department visit within the post-trigger window: Percent of valid episodes with a relevant ED visit within the post-trigger window. Admission within the post-trigger window: Percent of valid episodes with a relevant admission or relevant observation care within the post-trigger window. Antibiotic injection for Strep A sore throat: Percent of valid episodes with an antibiotic injection for Strep A sore throat within the trigger or post-trigger windows. Steroid injection for Strep A sore throat: Percent of valid episodes with a steroid injection for Strep A sore throat within the trigger or post-trigger windows.

Pneumonia episode definition

Area	Episode definition
1 Identifying episode triggers	<ul style="list-style-type: none"> A pneumonia (PNA) episode is triggered by an inpatient admission or an ED/observation outpatient claim where either <ul style="list-style-type: none"> The primary diagnosis is one of the defined PNA trigger diagnosis codes, or The primary diagnosis is one of the defined septicemia codes, with a secondary diagnosis code from the PNA trigger codes
2 Attributing episodes to Quarterbacks	<ul style="list-style-type: none"> The quarterback is the facility that treated the PNA
3 Identifying services to include in episode spend	<ul style="list-style-type: none"> All related care – such as imaging and testing, follow-up visits, and medications – is included in the episode spend The episode starts with the triggering event and ends 30 days after discharge
4 Risk adjusting and excluding episodes	<ul style="list-style-type: none"> Episodes affected by factors that make them inherently more costly than others are risk adjusted. Episodes which are not comparable or affected by factors that make them inherently more costly but that cannot be risk-adjusted for are excluded. There are three types of exclusions: <ul style="list-style-type: none"> Business exclusions: Available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice, Age younger than 90 days of age or >64) Clinical exclusions: Age, cancer under active management, coma, cystic fibrosis, end stage renal disease, multiple sclerosis, organ transplant, specific acute care, Parkinson's, and other episode-specific conditions High cost outlier exclusions: Episode's risk adjusted spend is three standard deviations above the mean
5 Determining quality metrics performance	<p>Tied to gain sharing:</p> <ul style="list-style-type: none"> Follow-up care within the post-trigger window: Percent of valid episodes with relevant follow-up care in the post-trigger window <p>Not Tied to gain sharing:</p> <ul style="list-style-type: none"> Follow-up care within first seven days of post-trigger window: Percent of valid episodes with relevant follow-up care within the first seven days of the post-trigger window Emergency department visit within the post-trigger window: Percent of valid episodes with an ED visit within the post-trigger window Admission within the post-trigger window: Percent of valid episodes with a relevant admission within the post-trigger window Follow-up visit versus relevant emergency department visit: Percent of valid episodes with the first visit being a relevant follow-up visit within the post-trigger window, for valid episodes that had any relevant post-trigger window visits Pseudomembranous colitis within the post-trigger window: Percent of valid episodes with pseudomembranous colitis occurring within the post-trigger window.

Outpatient UTI episode definition

Area	Episode definition
1 Identifying episode triggers	<ul style="list-style-type: none"> An Outpatient UTI episode is triggered by a professional claim where either <ul style="list-style-type: none"> The primary diagnosis is one of the defined UTI trigger codes along with an E&M code for an office, outpatient, or ED setting, or The primary diagnosis is one of the defined UTI symptom codes, with a secondary diagnosis code from the UTI trigger codes
2 Attributing episodes to Quarterbacks	<ul style="list-style-type: none"> The quarterback is the clinician or clinician group that diagnosed the UTI
3 Identifying services to include in episode spend	<ul style="list-style-type: none"> All related care – such as imaging and testing, follow-up visits and medications – is included in the episode spend Facility fees associated to the E&M visit on the day the UTI was diagnosed, are not included in spend The episode starts the day the UTI was diagnosed and ends 14 days after the diagnosis
4 Risk adjusting and excluding episodes	<ul style="list-style-type: none"> Episodes affected by factors that make them inherently more costly than others are risk adjusted. Episodes which are not comparable or affected by factors that make them inherently more costly but that cannot be risk-adjusted for are excluded. There are three types of exclusions: <ul style="list-style-type: none"> Business exclusions: Available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice, Age younger than 1 year of age or >64) Clinical exclusions: Admission during trigger window or one day after, cancer under active management, coma, cystic fibrosis, end stage renal disease, multiple sclerosis, organ transplant, Parkinson's High cost outlier exclusions: Episode's risk adjusted spend is three standard deviations above the mean
5 Determining quality metrics performance	<p>Tied to gain sharing:</p> <ul style="list-style-type: none"> Admission in trigger window for ED triggered episodes Admission in trigger window for non-ED triggered <p>Not tied to gain sharing:</p> <ul style="list-style-type: none"> Percent of valid episodes with an included ED visit in the post-trigger window. Percent of valid episodes with an included admission or included observation care within the post-trigger window. Percent of valid episodes with pseudomembranous colitis occurring within the post-trigger window. Percent of valid episodes with a urinalysis within the episode window. Percent of valid episodes with a urine culture within the episode window among the valid episodes that also had a urinalysis. Percent of valid episodes with a renal ultrasound within post-trigger window, for patients under age two

Inpatient UTI episode definition

Area	Episode definition
1 Identifying episode triggers	<ul style="list-style-type: none"> An Inpatient UTI episode is triggered by an inpatient admission or observation outpatient claim where either <ul style="list-style-type: none"> The primary diagnosis in one of the defined UTI trigger codes, or The primary diagnosis is one of the defined septicemia codes, with a secondary diagnosis code from the UTI trigger codes
2 Attributing episodes to Quarterbacks	<ul style="list-style-type: none"> The quarterback is the facility that treated the UTI
3 Identifying services to include in episode spend	<ul style="list-style-type: none"> All related care – such as imaging and testing, follow-up visits and medications – is included in the episode spend The episode starts the day of the triggering UTI and ends 30 days after discharge
4 Risk adjusting and excluding episodes	<ul style="list-style-type: none"> Episodes affected by factors that make them inherently more costly than others are risk adjusted. Episodes which are not comparable or affected by factors that make them inherently more costly but that cannot be risk-adjusted for are excluded. There are three types of exclusions: <ul style="list-style-type: none"> Business exclusions: Available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice, Age younger than 18 years of age or >64) Clinical exclusions: Cancer under active management, coma, cystic fibrosis, end stage renal disease, multiple sclerosis, organ transplant, Parkinson's High cost outlier exclusions: Episode's risk adjusted spend is three standard deviations above the mean
5 Determining quality metrics performance	<p>Tied to gain sharing:</p> <ul style="list-style-type: none"> Follow-up care within the post-trigger window <p>Not tied to gain sharing:</p> <ul style="list-style-type: none"> Percent of valid episodes with relevant follow-up care within the first seven days of the post-trigger window Percent of valid episodes with an ED visit within the post-trigger window Percent of valid episodes with a relevant admission within the post-trigger window Percent of valid episodes with the first visit being a relevant follow-up visit within the post-trigger window, for valid episodes that had any relevant post-trigger window visits Percent of valid episodes with pseudomembranous colitis occurring within the post-trigger window.

Examples of Changes made based on previous Episode Design Feedback Sessions

1 ▪ All Episode Feedback

- *Aligning readmission logic with future waves of episodes.*

In 2015, all wave one episodes of care included readmissions based on an exclusionary logic. Following the Feedback Session, readmissions were based on an inclusionary logic, meaning that only specifically related admissions are now included.

2 ▪ Episode: Acute Asthma Exacerbation

- *Expand the definition of the appropriate medications quality metric to include oral and/or injectable corticosteroids filled during the trigger window in the hospital setting (e.g. Emergency Department, Observation and/or inpatient stay) and the post-trigger window rather than just in the post-trigger window.*

Guidelines for medication use during an acute asthma exacerbation now recommend giving early systematic glucocorticoids to all patients who have a moderate or severe exacerbation. The appropriate medications will be included in the quality metric during both the trigger and post-trigger window.

Respiratory and Primary Care Episodes feedback received to date

Area	Feedback
Identifying episode triggers	<ul style="list-style-type: none"> ▪ Review trigger codes to ensure that contingent and primary triggers do not overlap for the Asthma episode.
Attributing episodes to quarterbacks	<ul style="list-style-type: none"> ▪ None
Identifying services to include in episode spend	<ul style="list-style-type: none"> ▪ Change the included spend logic to ensure that only claims related to an outpatient UTI are included in spend.
Risk adjusting and excluding episodes	<ul style="list-style-type: none"> ▪ Exclude bronchiolitis from the pneumonia episode. ▪ Remove all spend related to Maternal Fetal Medicine Specialists from the Perinatal episode. ▪ Exclude Sickie Cell Disease from the Asthma, Pneumonia and Inpatient UTI episodes. ▪ Exclude genetic testing from the Perinatal episode.
Determining quality metrics performance	<ul style="list-style-type: none"> ▪ Update the HIV screening quality metric in the Perinatal episode to include code 80081. ▪ Update C-section quality metric in the Perinatal episode to factor in previous C-sections.

Topics for Discussion

Design Dimensions

1**Identifying episode triggers****2****Attributing episodes to
quarterbacks****3****Identifying services to include in
episode spend****4****Risk adjusting and excluding
episodes****5****Determining quality metrics
performance**

General Episode Feedback

Next steps following this feedback session

- **Review** all feedback received both prior and during the feedback session
- **Analyze** the potential changes and possible impact on episode design
- **Release** memo summarizing changes to episode design in the late-summer
- **Incorporate** changes that need to be made for the 2018 performance period

Thank you for participating!

Please contact payment.reform@tn.gov with any questions or visit our website at: www.tn.gov/hcfa/topic/episodes-of-care